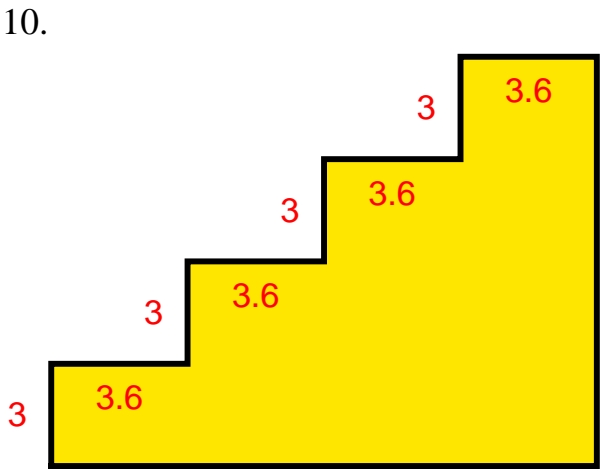
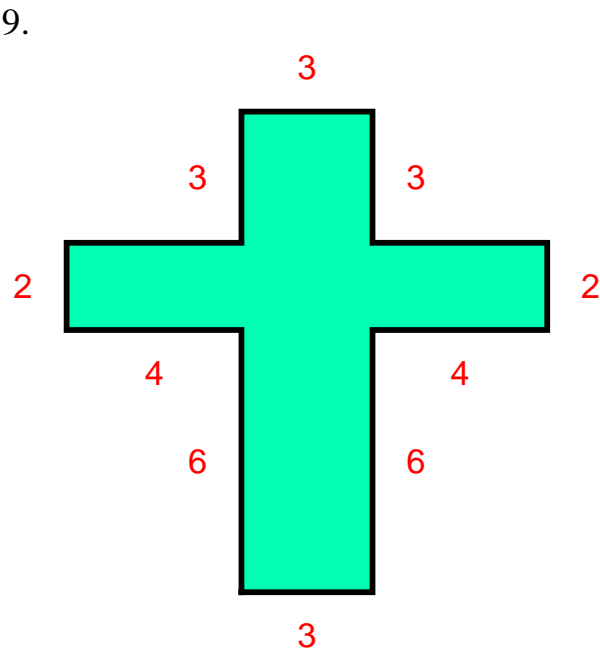


Worksheet 9.1 : Rectangles

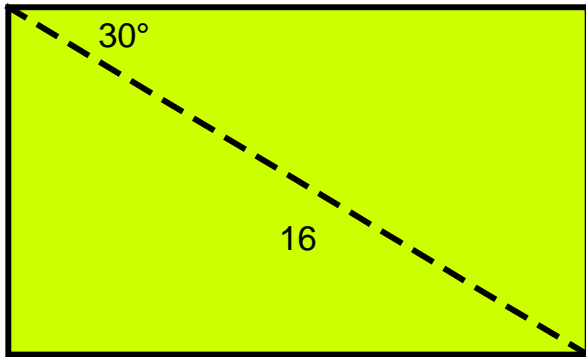
Complete the table below. Exercises 1 - 8 refer to rectangles.

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|---|----|-----|----|----|---------|------------|----------|------------|
| b | 16 | | 10 | 16 | $2x$ | x | $4k - 1$ | |
| h | | 8 | | | $x - 3$ | | $k + 2$ | y |
| A | 80 | 120 | | | | $x^2 - 3x$ | | $y^2 + 7y$ |
| p | | | 30 | 42 | | | | |

Consecutive sides of the figures below are perpendicular. Find the area of each figure.



11.



12. The diagonals of a square are $8\sqrt{2}$. Find the area.

13. The area of a square is 26. Find the length of the diagonals.

14. The diagonals of a rectangle are 16 and intersect at an angle of 60° . Find the area.

15. The lengths of the sides of three squares are m , $m + 1$, and $m + 2$. The total area of the square is 365. Find the value of m .

16. The height of a rectangle is three times as long as its base, and its area is 243. Find its dimensions.

17. If rectangle XYZW below has area $36\sqrt{3}$, find its length and its width.

